Plausibility

Joop J. Klant
University of Amsterdam

I

Analysis of the logical structure of economic theories shows that basic theories do not comply with Popper’s condition of falsifiability (Klant 1990, 6–8)¹. They are heuristic systems. If they are accepted it is because of their attributed plausibility. They can be considered seemingly true (by their adherents).

It can be maintained of course that physical theories are plausible too. That is so in view of the Duhem-Quine thesis, the existence of anomalies in research programs according to Lakatos and in general the fact that universal statements cannot be verified. Scientific theories are however criticizable along Popper’s four lines. Economic basic theories are defective in this respect. The gap must be filled with plausible reasoning. When I speak of “plausibility” in this sketch I mean that additional activity. “Differences make a difference”, William James said. I speak of plausibility of a higher degree.

It is well worth remarking in this connection that Popper’s philosophy actually must be considered to constitute a comparative static long term metatheory. It is the description of an ideal. What happens on the time path is described by Kunn, Lakatos and Feyerabend. Even the dadaistic picture of the latter contains an ideal. Feyerabend sees in the activities of methodologists to maintain law and order an attempt that is harmful to progress:

“A empiricist may regard progress as the development towards a theory whose basic assumptions have been tested. Others may see in it the development towards a logical, consistent whole of theories and hypotheses, if necessary at the expense of complete agreement with the facts” (1975, 27).

Consistency and testing are also the ingredients of Popper’s ideal. Testing in economics is affected by a gap to be plausibly filled.

II

Economists have adopted certain plausibility strategies. They see them as leading to the truth, but actually the strategies do not yield universal statements that are corroborated. They see these as evident, but actually they are not fully subjected to integral Popperian criticism. They are plausible (to their adherents) of a higher degree.

One of these strategies is that of the realism of assumptions. It was explicitly stated for the first time in 1691, when Roger North introduced the text of his brother Dudley with the explanation that this was for once a philosophical – that is in the language of today scientific – treatise, for in accordance with Descartes’s requirement the Discourses upon Trade derive the workings of the trade mechanism “from principles undisputably true” (1954). The idea of the Cartesian structure of economic theories was further developed by John Stuart Mill and Nassau William Senior. Their arguments have been taken over by John Elliot Cairnes, John Neville Keynes and Lionel Robbins. I dealt elaborately with these authors in my (1984).

I call them “empirical a priorists”, for they keep faith with their empiricist conscience by basing their “principles undisputably true” on experience. According to Robbins the generalizations of economists are ultimately based on simple facts of experience which are incontestably established (1932, 104-135). If the fundamental postulates of economics, he reasons, are true by virtue of their simplicity and immediate familiarity then the conclusions must also be true (Klant, 1984, 57). “Economic laws,” Robbins wrote, “describe inevitable implications” (1932, 121). Mill called it the “concrete-deductive method” or “a priori method” and the establishing of premises “direct induction”.

There are also rationalistic a priorists. They attribute a special quality to the principles undisputably true. According to Ludwig von Mises they are Kantian synthetic judgements a priori. Propositions which are necessarily valid.
and cannot be proved by any experience just like the “categories” of spatiality and causality (1956, p56). They are essentially forms of experience. Economics is a branch of praxeology. It has a teleological character.

Whatever empirical and rationalistic apriorists may think of their methods of proving the truth, they do not establish the acceptability of a theory by testing the conclusions from their premises. They are describing an alternative practice of plausible reasoning which fills the gap. They are following a plausibility strategy.

Another plausibility strategy is the method of diminishing abstraction. The economists start with a highly idealized case and gradually diminish its simplicity and abstractness by introducing conditions which make it truer to reality. Marx’s Kapital is a very good example, but the work of consecutive authors too can often be arranged in a pattern of diminishing abstraction. Progress in the natural sciences can be depicted in a similar way but it is more restrained by the condition of continuous empirical testing than the development of separate branches of economics. There, the gradual “concretization” by assuming more real conditions is considered in itself as an increasing approximation of truth. The logical analysis of the development of the neoclassical theory of international trade by Bert Hamminga (1982) and that of the capital debate by Jack Birner (1990) are good illustrations.

III

Where logic and testing fall short the metaphor enters. A metaphor is a figure of speech in which one thing is likened to another, different thing by being spoken of as if it were that other. According to the philosopher David Cooper a metaphor has no meaning, it has no truth-value, but

“much of the interest and pleasure we feel in certain metaphors is due to the searches they send us upon ….. What makes them eminently repeatable is that they keep open lines of thought, directions in which to search” (1986, 250).

It is exactly in this way that researchers use them. A metaphor is a heuristic device.

Sometimes the lines of thought get closed by continuous research. “Force” has no longer an anthropomorphic flavor, but became a testable relation between particles. It is a dead metaphor. A metaphor can be killed by an operational definition such as for instance “price level” by “price index number”, but the theoreticians are not always prepared to adopt the inventions of the empirical researchers. “Aggregate capital” and “human capital” are still living metaphors.

In physics metaphors are ways of discovery. They are abandoned when the research program came to an end such as, for instance, the Rutherford-Bohr model, in which the structure of an atom was likened to that of a solar system. In economics the lines of thought usually remain open. Walras’s metaphor of classical mechanics is still alive (Mirowski 1990). It changed our view, but its outcome was not a corroborated theory.

The main metaphor of the economists is that of the mechanism. Adam Smith wrote in his Theory of Moral Sentiments: “Human society, when we contemplate it in a certain abstract and philosophical light, appears like a great, an immense machine whose regular and harmonious movements produce a thousand agreeable effects” (1976, 316).

We are still looking with the pleasure of scholars and researchers at the huge machine. Our models describe mechanisms.

The fundamental hypotheses upon which our theories rest are idealizations and metaphors. The rational actors in micro-economics, deciding under conditions of perfect and imperfect competition, certainty and uncertainty, do not exist. They are stylized, that is, they are metaphors. Milton Friedman, rightly so, calls these premises as-if-hypotheses, but unfortunately the theories which they yield cannot be tested as easily as he assumes (1953). They produce plausible results.

I end with a metaphor. In economics metaphors have a longer life than in physics. They do not change as easily into testable relations. Economics is therefore poetry to a higher degree. As Donald McCloskey rightly says: “What is successful in economic metaphor is what is successful in poetry, and the success is analyzable in similar terms” (1985, 78).

Note
1. The article contains a slip. The restriction of the simple model is of course not \(0 < s > 1\), but \(0 < s < 1\) (p. 7).

Bibliography
Blackwell.


